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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/676,844	09/30/2003	Jens Ittel	000005-005900US 3764		
	7590 09/06/200 <sup>-</sup> EAD LAW GROUP, PO		EXAMINER		
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SUITE 509 SANTA CLAR	A, CA 95050	ART UNIT PAPER NUMI			
			2194		
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			09/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

					Q:			
		Application No.	Α .	Applicant(s)				
		10/676,844	וָ	TTEL ET AL.				
Office Action Summe	ary	Examiner	Δ.	Art Unit				
		KimbleAnn Verdi		194				
The MAILING DATE of this co Period for Reply	ommunication app	ears on the cover s	heet with the cor	respondence ac	Idress			
A SHORTENED STATUTORY PER WHICHEVER IS LONGER, FROM  - Extensions of time may be available under the pafter SIX (6) MONTHS from the mailing date of If NO period for reply is specified above, the material part of the property within the set or extended period Any reply received by the Office later than three earned patent term adjustment. See 37 CFR 1.	THE MAILING DA provisions of 37 CFR 1.13 this communication. ximum statutory period w d for reply will, by statute, months after the mailing	TE OF THIS COM 6(a). In no event, however ill apply and will expire SIX cause the application to be	MUNICATION.  T, may a reply be timely  (6) MONTHS from the come ABANDONED (	r filed mailing date of this c (35 U.S.C. § 133).				
Status								
1) Responsive to communication	n(s) filed on <u>06 Ju</u>	<u>ne 2007</u> .						
2a)⊠ This action is FINAL.	2a) ☑ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the	e practice under <i>E.</i>	x parte Quayle, 19	35 C.D. 11, 453	O.G. 213.				
Disposition of Claims								
4)⊠ Claim(s) <u>1-8 and 10-19</u> is/are	pending in the ap	plication.						
4a) Of the above claim(s)	is/are withdraw	n from considerati	on.					
5) Claim(s) is/are allowed								
	6)⊠ Claim(s) <u>1-8, and 10-19</u> is/are rejected.							
7) Claim(s) is/are objecte 8) Claim(s) are subject to		election requireme	ant .					
o)[_] Claim(s) are subject to	restriction and/or	Ciccion requirem						
Application Papers					•			
9)☐ The specification is objected t	<del>-</del>							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objection	-							
Priority under 35 U.S.C. § 119			•					
12) ☐ Acknowledgment is made of a a) ☐ All b) ☐ Some * c) ☐ Nor	•	priority under 35 U	.S.C. § 119(a)-(	d) or (f).				
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office	ce action for a list (	or the certified copi	es not receivea.		•			
Attachment(s)		л. —	andow Ormania (5)	TO 412)				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing R</li> </ol>	teview (PTO-948)	Pa	erview Summary (P per No(s)/Mail Date	· ·				
3) Information Disclosure Statement(s) (PTO Paper No(s)/Mail Date		· —	otice of Informal Pate her:	ent Application				
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#### DETAILED ACTION

This office action is in response to the Amendment filed on June 18, 2007. Claims 1-10, 13-20, 22, 24-28, and 30-35 are pending in the current application. All previously outstanding objections and rejections to the Applicant's disclosure and claims not contained in this Action have been respectfully withdrawn by the Examiner hereto.

### Response to Amendment

1. Amendment to the drawings and specification overcomes the previous objection to the drawings and specification.

Amendment to claims 1-18 overcomes the 35 U.S.C. §101 rejection. Therefore, the rejection of claims 1-18 under 35 U.S.C. §101 is withdrawn.

# Response to Arguments

- 2. Applicant's arguments with respect to claims 8 and 10 have been considered but are most in view of the new ground(s) of rejection.
- 3. Applicant's arguments with respect to claim 11 have not been given any merit since the rejection was made with the combination of COM and Weinreb (page 13, item 26).
- 4. Applicant's arguments filed on June 12, 2007 have been fully considered but they are not persuasive. In response to the Non-Final Office Action dated March 12, 2007, applicant argues in regards to claims 1, 12, and 19:
  - (1) The combined teachings of START and SNAPDEV cited by the examiner as rendering the claims 1, 12, and 19 unpatentable, the applicant respectfully disagrees. The applicant maintains that the examiner has not

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shown art consisting of a single component with multiple interfaces and respective functionalities, as required by the applicant's claims. SNAPDEV does nothing to remedy this. (page 15, lines 9-19)

In response to argument (1), examiner respectfully disagrees and notes that claims 1, 12, and 19 does not recite the feature of "a single component with multiple interfaces and respective functionalities"; therefore applicant's argument is not persuasive because claims 1, 12, and 19 does not require the limitation of "a single component with multiple interfaces and respective functionalities". Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

# Claim Objections

- 5. Claims 4 and 11 are objected to because of the following informalities:
  - a. claim 4, line 3, recitation of "the component", should be "the reusable component";
  - b. claim 11, line 7, the recitation of "interface context data and configuration context data", should be "interface data and configuration data".
  - c. Appropriate correction is required.

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 7. Claims 1-6, 12-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Getting Started with SNAP™," by Template Software, Inc. (hereinafter START), in view of "Using the SNAP™ Development Environment," by Template Software, Inc. (hereinafter SNAPDEV).
- 8. As to claims 1, START teaches the invention substantially as claimed including a computer program product, tangibly embodied in a machine-readable storage device, comprising instructions operable to cause data processing apparatus to:

implement a reusable software component encapsulating functionality, multiple instances of the component being usable at the same time (Object Model component, Fig. 5-1, page 5-3 of START);

the reusable component having a programming interface for programmatic interaction with the reusable component (External Application Software component, Fig. 5-1, page 5-3 of START);

the reusable component having a data-binding interface for data communication with the reusable component (Communication component, Fig. 5-1, page 5-3 of START); and

the reusable component having a visual interface for access to the at least one visual representation of the reusable component (Graphic User Interface component, Fig. 5-1, page 5-3 of START).

START does not explicitly disclose the reusable component having at least one visual representation.

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However SNAPDEV teaches the reusable component having at least one visual representation (Instance of GUI Object Class, e.g. Window or Display, Display Classes Table 4-2, page 4-5 and 4-6 of SNAPDEV).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the object model of START with the teachings of Display Class from SNAPDEV because this documentation describes release 8.0 of the SNAP™ product and is a publication of the SNAP™ documentation set (page 1-5, table 1-2 of SNAPDEV).

- 9. As to claim 2, START teaches the computer program product of claim 1, wherein the programming interface, the data-binding interface, and the visual interface are separate interfaces (Foundation Template Components, Fig 5-1, page 5-3).
- 10. As to claim 3, START teaches the computer program product of claim 1, further comprising:

Instructions to implement one or more controllers for the reusable component (Inference Engine, Event Handler, Fig. 5-1, page 5-3), each controller having an associated context for storing data and state for the controller (Rule-based knowledge sources and Event-driven knowledge sources for storing values and procedures, page 5-14, lines 38-48).

11. As to claim 4, START as modified teaches the computer program product of claims 3, further comprising:

Instructions to implement one or more views for the reusable component (e.g. Displays), each view providing a visual representation of the reusable component

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(Graphic User Interface is comprised of Displays, page 4-2, lines 1-7 and 45-50 of SNAPDEV).

12. As to claim 5, START as modified teaches the computer program product of claims 1, further comprising:

Instructions to embed a sub-component into the reusable component (create object model for each process in application (parent object model), page 3-2, lines 1-3 of SNAPDEV).

13. As to claim 6, START as modified teaches the computer program product of claim 5 wherein the instructions to embed the sub-component comprises:

use a programming interface, a data-binding interface, and a visual interface of the sub-component (e.g. child object model) created from Foundation Template Components, Fig 5-1, page 5-3 of START) (create object model for each process in application (parent object model), page 3-2, lines 1-3 of SNAPDEV).

- 14. As to claims 12-17, these claims are rejected for the same reasons as claims 1-6 respectively, see the rejections to claims 1-6 above.
- 15. As to claim 19, this claim is rejected for the same reasons as claim 1, see the rejection to claim 1 above.
- 16. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over START, as modified by SNAPDEV, as applied to claims 1 and 12 above, and further in view of "Using the SNAP™ Language," by Template Software, Inc. (hereinafter LANG).

As to claim 7, START as modified by SNAPDEV teaches the invention substantially as claimed including the computer program product claim 1 wherein the

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programming interface includes an interface controller (Inference Engine, Fig. 5-1, page 5-3 of START) and a configuration controller (Event Handler, Fig. 5-1, page 5-3 of START), the visual interface includes an interface view (Graphic User Interface Editor, page 4-2, lines 45-46 of SNAPDEV), and the data-binding interface provides context mapping for the interface controller context and the configuration context (SIB mapping, import/export map, page 5-3, table 5-1, of SNAPDEV).

START as modified by SNAPDEV does not explicitly disclose having an interface controller context and having a configuration controller context.

However LANG teaches having an interface controller context (rule-based knowledge sources, page 3-4, lines 25-31 of LANG) and having a configuration controller context (demon, event driven knowledge source, page 3-4, lines 32-35 of LANG).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have further modified the Programming Interface of START as modified by SNAPDEV with the teachings of knowledge sources from LANG because this documentation describes release 8.0 of the SNAP™ product and is a publication of the SNAP™ documentation set (page 1-5, table 1-2 of LANG).

- 17. As to claim 18, this claim is rejected for the same reasons as claim 7, see the rejection to claim 7 above.
- 18. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Using the SNAP™ External Application Software Component," by Template Software, Inc.

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(hereinafter EXT), in view of "Getting Started with SNAP™," by Template Software, Inc. (hereinafter START).

19. As to claim 8, EXT teaches a computer program product, tangibly embodied in a machine-readable storage device, the computer program product comprising instructions the computer program product comprising instructions operable to cause data processing apparatus to:

implement an application runtime framework (e.g. running SNAP External Application Software, page 3-2, lines 3-4), the framework being operable to: receive a specification of a component interface (e.g. handle) to be used in an application without a specification of a corresponding component implementation (SNAP Object Model module of the External Application Software component uses handles to access SNAP elements, page 3-3, lines 20-23 of EXT); and

instantiate a particular component implementation at application runtime (SNAP Object Model module of the External Application Software component provides functions to create and delete object in an object model, page 2-2, lines 10-19 of EXT), the particular component implementation being selected from one or more component implementations corresponding to the component interface (SNAP Object Model module of the External Application Software component provides functions to view, change, create, and delete object model data, page 3-2, lines 5-7 of EXT).

EXT does not explicitly disclose, the component interface has a programming interface, a data-binding interface, and a visual interface.

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However START teaches the component interface has a programming interface, a data-binding interface, and a visual interface (Foundation Template Components, Fig 5-1, page 5-3 of START).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the handle of EXT with the teachings of Foundation Template Components from START because this documentation describes release 8.0 of the SNAP™ product and is a publication of the SNAP™ documentation set (page 1-5, table 1-2 of START).

- 20. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Getting Started with SNAP™," by Template Software, Inc. (hereinafter START) in view of U.S. Patent 6,748,455 B1 to Hinson et al. (hereinafter Hinson).
- 21. As to claim 10, START does not teach a computer program product, tangibly embodied in a machine-readable storage device an information carrier, for implementing an application runtime framework, the computer program comprising instructions operable to cause data processing apparatus to:

receive an event subscription directed to a subscribing component when the subscribing component has not been instantiated, the event subscription specifying subscriptions to one or more events generated by sub-components embedded by the subscribing component;

cache events generated by the sub-components that are specified by the event subscription while the subscribing component has not been instantiated; and

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forward any cached events to an instance of the subscribing component after the subscribing component is instantiated.

However Hinson teaches receive an event subscription directed to a subscribing component when the subscribing component has not been instantiated (col. 15, lines 40-43), the event subscription (Fig. 6) specifying subscriptions to one or more events generated by sub-components (e.g. publishers) embedded by the subscribing component (e.g. subscriber, Fig. 6, col. 12, lines 33-48 and Fig. 24, col. 17, lines 7-19);

cache events generated by the sub-components that are specified by the event subscription while the subscribing component has not been instantiated (col. 15, lines 58-62); and

forward any cached events to an instance of the subscribing component after the subscribing component is instantiated (col. 15, lines 40-46).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the event-driven knowledge source of START with the teachings of a object –based event communication system from Hinson because these feature would have provided a publish and subscribe event communications model for more effectively advertising availability of and distributing information to interested parties without a priori knowledge of their identity (col. 6, lines 55-59 of Hinson).

22. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Using the SNAP™ Communication Component" (hereinafter COM) in view of U.S. Patent 5,426,747 A1 to Weinreb et al. (hereinafter Weinreb).

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23. As to claim 11, COM teaches the invention substantially as claimed including a computer program product, tangibly embodied in a machine-readable storage device, for implementing an application runtime framework, the computer program product comprising instructions operable to cause data processing apparatus to:

receive one or more context mappings (e.g. SIB Mappings) for a component, the context mappings being specified by a component embedder to exchange context data with the component (specify a SIB mapping declaratively, pg 5-10, lines 1-49 and Using SIB Connection Editor, page 5-9, lines 13-15) the context data comprising interface data (e.g. class objects) and configuration data (e.g. class attributes) (page 5-4, lines 1-4); and

create the specified context mappings for the component after the component has been instantiated (mappings take effect when connection is made, page 5-10, line 36).

COM does not explicitly disclose if the component has not been instantiated, cache the specified context mappings.

However Weinreb teaches if the component has not been instantiated, cache the specified context mappings (data section transferred to client computer's cache memory, col. 3, lines 14-17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the system of COM with the teachings of cache memory from Weinreb because this feature would have provided a mechanism to allow

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a client computer to keep data in its cache between transactions and to ensure data consistency and coherency (col. 2, lines 19-21 of Weinreb).

#### Conclusion

- 24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KimbleAnn Verdi whose telephone number is (571) 270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KV February 22, 2007

> WILLIAM THOMSON WILLIAM THOMSON PATENT EXAMINER